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09/931,781	08/17/2001	Sang-Ho Park	678-721 (P9889)	3651

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EXAMINER

GIBSON, ERIC M

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 08/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/931,781

Applicant(s)

PARK ET AL.

Examiner

Eric M Gibson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 31 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 2, 4-8, 11-14, 16-21, 23-28, 30-41, 43, 44, and 49-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Sekiyama (US006427115B1).

a. As per claim 1, Sekiyama teaches a portable terminal and on-vehicle information processing device that includes an information center having a map database, for receiving information about a present vehicle position and a destination from a navigation terminal, searching out an optimum route and generating route guidance data (column 5, lines 15-35), the navigation terminal inside the vehicle having a separate mobile terminal (22, figure 1) for wirelessly connecting to a wireless communication network (inherent infrastructure for portable telephones) and a separate ITS terminal (10, figure 1) having a GPS device for calculating the present position of the vehicle (12, figure 1), wherein the terminal receives the route guidance data and announces point by point node guidance (column 7, lines 6-11).

b. As per claim 2, Sekiyama also teaches displaying image data (column 6, line 62 – column 7, line 6).

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c. As per claims 4 and 5, Sekiyama teaches announcing the message through the speaker (18, figure 1) and also that the mobile terminal contains a speaker (column 4, lines 66-67).

d. As per claims 6 and 7, Sekiyama teaches inputting the data through the ITS and the mobile terminal (column 7, lines 22-24).

e. As per claim 8, the information center in Sekiyama takes into account traffic data (column 6, lines 54-56).

f. As per claim 11, Sekiyama teaches the node point includes an intersection (column 7, lines 10-11).

g. As per claim 12, Sekiyama teaches a method of guiding a vehicle that includes an information center having a map database, for receiving information about a present vehicle position and a destination from a navigation terminal, searching out an optimum route and generating route guidance data (column 5, lines 15-35), the navigation terminal inside the vehicle having a separate mobile terminal (22, figure 1) for wirelessly connecting to a wireless communication network (inherent infrastructure for portable telephones) and a separate ITS terminal (10, figure 1) having a GPS device for calculating the present position of the vehicle (12, figure 1), wherein the terminal receives the route guidance data and announces point by point node guidance (column 7, lines 6-11).

h. As per claim 13, Sekiyama also teaches displaying image data (column 6, line 62 – column 7, line 6).

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i. As per claim 14, the information center in Sekiyama takes into account traffic data (column 6, lines 54-56).

j. As per claim 16, Sekiyama teaches the node point includes an intersection (column 7, lines 10-11).

k. As per claim 17, Sekiyama teaches requesting a new route (column 7, lines 18-31).

l. As per claim 18, Sekiyama teaches a method of guiding a vehicle that includes an information center having a map database, for receiving information about a present vehicle position and a destination from a navigation terminal, searching out an optimum route and generating route guidance data (column 5, lines 15-35), the navigation terminal inside the vehicle having a separate mobile terminal (22, figure 1) for wirelessly connecting to a wireless communication network (inherent infrastructure for portable telephones) and a separate ITS terminal (10, figure 1) having a GPS device for calculating the present position of the vehicle (12, figure 1), wherein the terminal receives the route guidance data and announces point by point node guidance (column 7, lines 6-11).

m. As per claims 19 and 20, Sekiyama also teaches displaying image data (column 6, line 62 – column 7, line 6) via either the portable terminal or the display (14, figure 1).

n. As per claim 21, the information center in Sekiyama takes into account traffic data (column 6, lines 54-56).

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o. As per claim 23, Sekiyama teaches the node point includes an intersection (column 7, lines 10-11).

p. As per claim 24, Sekiyama teaches requesting a new route (column 7, lines 18-31).

q. As per claim 25, Sekiyama teaches a method of guiding a vehicle that includes an information center having a map database, for receiving information about a present vehicle position and a destination from a navigation terminal, searching out an optimum route and generating route guidance data (column 5, lines 15-35), the navigation terminal inside the vehicle having a separate mobile terminal (22, figure 1) for wirelessly connecting to a wireless communication network (inherent infrastructure for portable telephones) and a separate ITS terminal (10, figure 1) having a GPS device for calculating the present position of the vehicle (12, figure 1), wherein the terminal receives the route guidance data and announces point by point node guidance (column 7, lines 6-11).

r. As per claims 26 and 27, Sekiyama also teaches displaying image data (column 6, line 62 – column 7, line 6) via either the portable terminal or the display (14, figure 1).

s. As per claim 28, the information center in Sekiyama takes into account traffic data (column 6, lines 54-56).

t. As per claim 30, Sekiyama teaches the node point includes an intersection (column 7, lines 10-11).

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u. As per claim 31, Sekiyama teaches requesting a new route (column 7, lines 18-31).

v. As per claim 32, Sekiyama teaches a mobile terminal which serves in a conventional portable telephone capacity when in disconnected mode (column 8, lines 31-33) and supplies downloaded navigation data from an information center when in the navigation mode (column 4, lines 59-66).

w. As per claim 33, Sekiyama teaches the information downloaded to the mobile terminal is transmitted to the ITS terminal in the vehicle (column 6, lines 62-67).

x. As per claim 34, Sekiyama teaches inputting destination (column 6, lines 21-22).

y. As per claim 35, the information center in Sekiyama teaches a map database (114, figure 2).

z. As per claim 36, Sekiyama teaches that the mobile terminal is used to display route guidance data (column 4, lines 24-29), the display inherently functions normally as a conventional portable telephone display when in the non-navigation mode.

aa. As per claim 37, 39 and 40, Sekiyama teaches inputting the data through the mobile terminal (column 7, lines 22-24), the keypad inherently functions normally as a conventional portable telephone keypad when in the non-navigation mode.

ab. As per claim 38, Sekiyama teaches that the mobile terminal include a microphone (column 4, lines 66-67).

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ac. As per claim 41, Sekiyama teaches a mobile terminal (22, figure 1) that bi-directionally transmits data between an information center (figure 2) by wireless communication (inherent infrastructure for portable telephones) and an ITS terminal (10, figure 1), including an input portion (column 7, lines 22-24) and a display (column 4, lines 24-29).

ad. As per claim 43, Sekiyama teaches inputting destination (column 6, lines 21-22).

ae. As per claim 44, Sekiyama teaches a menu (figure 3 (b)).

af. As per claims 49 and 51, Sekiyama teaches the mobile terminal is removable (see figure 1).

ag. As per claims 50 and 52, Sekiyama teaches that the mobile terminal is a portable telephone (column 8, lines 31-32).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation



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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiyama in view of Fastenrath (US005889477A).

a. As per claim 9, Sekiyama teaches the invention as explained in the rejection of claim 1. Sekiyama further teaches a plurality of servers (figure 2 and column 5, lines 17-20) for generating traffic information, searching out the optimum route, and connecting to the wireless communication network. While Sekiyama does provide for traffic information (column 6, line 55), there is no explicit teaching of the plurality of sensors installed on roads for collecting traffic information. There exist multiple methods of collecting traffic data in the prior art. These methods can range from stationary sensors installed in roads to mobile units installed in vehicles. One exemplary reference is Fastenrath '477, which teaches a plurality of sensors installed on roads (8, figure 1) that collect traffic information. It would have been obvious to one of ordinary skill in the art, at the time of invention, to collect traffic information for a traffic database, as taught in Sekiyama, by using sensors installed on the roads, as is a known method in the art, exemplified by the example of Fastenrath '477, in order to provide the actual data that makes up the database.

3. Claims 10, 15, 22, 29, 42, and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiyama in view of Sulich et al. (US005875412A).

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a. As per claims 10, 15, 22, and 29, Sekiyama teaches the invention as explained in the rejections of claims 1, 12, 18, and 25. Sekiyama teaches a display for navigation guidance, including typical street image representations (as seen in figure 4 (c)), however does not explicitly teach information about road-type, link type, and angles at an intersection. This data is considered to be typically included in the art of vehicle navigation, as evidenced by Sulich including road attributes (column 7, line 30-31). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include information typical in the art of vehicle navigation in the system of Sekiyama, as evidenced by Sulich.

b. As per claims 42 and 45-48, Sekiyama teaches the invention as explained in the rejection of claims 6, 41 and 43. Sekiyama does not teach a key used to transition the terminal to navigation mode. Sulich teaches transitioning between a navigation mode and a voice call mode (50 and 52, figure 3). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include a means for transitioning from a navigation mode and a voice-call mode in a portable terminal as taught by Sulich, in order to be able to use the portable terminal as intended.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 2 and 4-52 have been considered but are moot in view of the new ground(s) of rejection.

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**Conclusion**

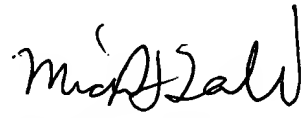
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hatano (US20010020213A1) teaches a navigation system, navigation information providing server and a navigation server. Higashikata et al. (US006046688A) teaches a navigation system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

EMG  
July 29, 2003

  
MICHAEL J. ZANELLI  
PRIMARY EXAMINER